

# Montana Laboratory Sentinel

Updates from the MT Laboratory Services Bureau



<http://healthlab.hhs.mt.gov/>

03/12/10

## Clinic Contamination of Diagnostic Specimens Result in False-Positive *B. pertussis* PCR Results

(EpiX – CDC 03/01/10)

CDC's investigation of an apparent pertussis outbreak found the source of the pseudo-outbreak to be environmental contamination of clinics with *B. pertussis* DNA.

CDC investigated a prolonged pertussis outbreak in which all cases were laboratory confirmed by PCR testing only. The outbreak persisted despite control measures, and clinical features were atypical of pertussis. Culture and serology for *Bordetella pertussis* were negative; other common respiratory pathogens were detected. Diagnostic *Bordetella* PCR cycle threshold values (at the IS481 target) were elevated, indicating low levels of amplified DNA and suggesting false-positives. Possible sources of DNA contamination that could result in PCR false-positives were assessed.

Environmental contamination with *B. pertussis* DNA was found in clinics. Furthermore, gloves were not routinely used for nasopharyngeal (NP) specimen collection. Accidental transfer of DNA most likely occurred from clinic surfaces to hands and then to NP specimens. Specimen collection swab tubes provided by the commercial laboratory contained a liquid transport medium that freely circulates around the swab stick during transport. Contaminant *B. pertussis* DNA on the swab stick most likely washed into the liquid media, which was extracted for PCR testing.

## Respiratory Syncytial Virus (RSV)

Respiratory syncytial (sin-SISH-uhl) virus, or RSV, is a respiratory virus that infects the lungs and breathing passages. Most otherwise healthy people recover from RSV infection in 1 to 2 weeks. However, infection can be severe in some people, such as **certain infants, young children, and older adults.** In fact, RSV is the most common cause of bronchiolitis (inflammation of the small airways in the lung) and pneumonia in children under 1 year of age in the United States. In addition, RSV is more often being recognized as an important cause of respiratory illness in older adults.

There is not yet a vaccine to protect against RSV. However, for children at high risk for serious disease, such as certain premature infants and infants with certain lung and heart conditions, monthly shots with a drug called palivizumab can help prevent serious illness during RSV season. Ask your healthcare provider if your child would be a candidate for the drug.

<http://www.cdc.gov/Features/RSV/>



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### Recently Published Standards and Guidelines:

- MM18-A CLSI Guideline Addresses Identification of Bacteria and Fungi Using DNA Target Sequencing [more...](#)
- X07-R—Surveillance for Methicillin-Resistant Staphylococcus aureus: Principles, Practices, and Challenges; [more...](#)
- EP22-P - Presentation of a Manufacturer's Risk Mitigation Information for Users of In Vitro Diagnostic Devices
- EP23-P - Laboratory Quality Control Based on Risk Management
- AUTO12-P - Specimen Labels: Content and Location, Fonts, and Label Orientation
- M100-S20 - Performance Standards for Antimicrobial Susceptibility Testing
- A New Guideline Supports the Development of Continuous Glucose Monitoring Device: Methods for determining analytical and clinical metrics of CGMs. [more...](#)

<http://www.clsi.org/>

[http://clsi.informz.net/clsi/archives/archive\\_736920.html](http://clsi.informz.net/clsi/archives/archive_736920.html)

*Exploring the Rivers of Change*

ASCLS-MT 2010 Spring Meeting  
Missoula, MT April 14-17, 2010

[ascls-montana.asclsregionviii.org/](http://ascls-montana.asclsregionviii.org/)

## MT Communicable Disease Update as of 03/05/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<http://cdepi.hhs.mt.gov>

**DISEASE INFORMATION** **Summary – Week 8 – Ending 02/27/10** – Disease reports received at DPHHS during the reporting period February 21-27, 2010 included the following:

- Vaccine Preventable Diseases: Varicella (6), Invasive *S. pneumoniae*
- Enteric Diseases: Campylobacteriosis (1), Cryptosporidiosis (1), Giardiasis (3), Shigellosis (1 - acquired out of U.S.)
- Other Conditions: Viral Meningitis (1)

### **NEW! Surveillance Snippets – Testing for Acute Infection**

**NEW! RSV** - Increased levels of RSV activity are being reported nationwide and around the state at this time. Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in children aged <1 year worldwide, some of which is severe and requires hospitalization. In addition, RSV is also responsible for severe respiratory disease in those >65 years old. In the U.S., RSV season generally begins during the fall and continues through the winter and spring, but the exact timing of RSV circulation varies by location and year. Data from the National Respiratory and Enteric Virus Surveillance System (NREVSS) are used to monitor the occurrence of RSV in the U.S. <http://www.cdc.gov/surveillance/nrevss/rsv/state.html>. Although individual cases of RSV are not reportable in Montana, outbreaks (>3 cases clustered by time/location) are. More information on RSV: [www.cdc.gov/rsv](http://www.cdc.gov/rsv)

### **Influenza**

**Montana** – Activity level in Montana is **NO ACTIVITY**. As of March 5, 2010, 761 MPHL PCR confirmed influenza cases had been reported from 40 counties since August 30, 2009. **No MPHL PCR confirmed cases have occurred since January 16, 2010.** Of the 2912 specimens submitted to the Montana Public Health Laboratory since August 30, 2009, 761 have been confirmed as 2009 H1N1 influenza cases. Of the 10,685 reports of confirmed or suspected H1N1 cases from providers and local health departments, 181 were hospitalized. 41% were female. Median age of those hospitalized was 42 (range 1 month – 88 years). 62% had underlying health conditions. Seventeen influenza-related deaths have been reported in Montana.

**IMPORTANT! Rapid tests are not performing reliably at this point; false positives are occurring. If providers want accurate information about influenza status on a patient, it is recommended that specimens be sent to the Montana Public Health Laboratory for PCR testing.** Current information on influenza testing by the Montana Public Health Laboratory can be found at <http://www.dphhs.mt.gov/PHSD/Lab/envirom-lab-index.shtml>.

**United States** - During week 8 (02/27/10), influenza activity stayed at the same level. Influenza and pneumonia deaths and doctor visits for flulike illnesses are below epidemic and baseline levels, respectively <http://www.cdc.gov/flu/weekly/>

**Norovirus** – Montana is currently experiencing increased levels of norovirus activity, particularly among residents of long-term care facilities and assisted living centers. Since January 1, 2010, a total of 5 different outbreaks occurring in 5 separate Montana communities have sickened approximately 165 residents and staff. Additionally, there have been reports and confirmed cases in 8 counties around the state (Cascade, Chouteau, Lewis & Clark, Park, Roosevelt, Teton, Valley, and Yellowstone). LHDs and providers have been asked to:

1. Increase active surveillance activities to detect outbreaks and clusters of gastrointestinal illness promptly
2. Share "Guidelines for the Control of Suspected or Confirmed Outbreaks of Viral Gastroenteritis (Norovirus) in Long Term Care Facilities" with facilities in your jurisdiction.
3. Consider providing educational information regarding the prevention of norovirus information to the public.

Guidance documents can be found at: <http://www.dphhs.mt.gov/PHSD/epidemiology/cdepi-norovirus.shtml>.

**TB and International Adoptions** – The situation in Haiti has brought to light the importance of health screening for international adoptees from countries with higher rates of tuberculosis than the US. **A summary of issues that must be considered is attached.** Questions? Call Denise Ingman at 444-0275. Information on screening for TB and other recommended screening (HIV, parasites, syphilis, vaccine recommendations, etc.), can be found at:

- <http://www.cdc.gov/immigrantrefugeehealth/exams/recommendations-domestic-medical-screening-haitian-orphan.html>
- <http://www.cdc.gov/immigrantrefugeehealth/exams/parents-adopting-children-haiti-earthquake.html>
- <http://www.cdc.gov/immigrantrefugeehealth/exams/adoptees-tuberculosis-screening-faq.html>